INTERNATIONAL CYBERSECURITY INSTITUTE

CERTIFICATE OF ATTENDANCE

This is to certify that

Akash Dubey

Has successfully completed

ICSI | Certified Network Security Specialist (CNSS)

George Thrasyvoulou
Program Director

Issued: 2020-08-04

Certificate ID: lfzbyp6lnf

Akash Dubey

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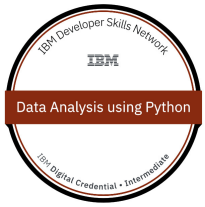


Data Analysis Using Python

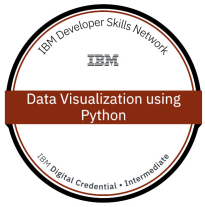
Issued by: IBM

Issued to: Akash Dubey

Issued on: 10 May 2020

Description

This badge earner understands the essential steps necessary to analyze data in Python using multi-dimensional arrays, manipulating DataFrames in pandas, using SciPy library of mathematical routines and performing machine learning using scikit-learn. This includes hands-on demonstration using Jupyter notebook in JupyterLab Python tools.



Data Visualization Using Python

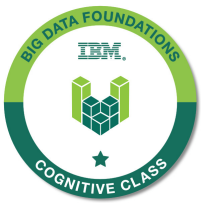
Issued by: IBM

Issued to: Akash Dubey

Issued on: 4 June 2020

Description

This badge earner understands how Python libraries such as Matplotib, Seaborn and Folium are used for the creation and customization of graphical representation outputs for both small and large-scale data sets.



Big Data Foundations - Level 1

Issued by: IBM

Issued to: Akash Dubey

Issued on: 8 June 2020

Description

This badge earner has a basic understanding of Big Data concepts and their applications to gain insight for providing better service to customers. The earner understands that Big Data should be processed in a platform that can handle the variety, velocity, and the volume of data by using

components that require integration and data governance.

IBM Blockchain Essentials V2

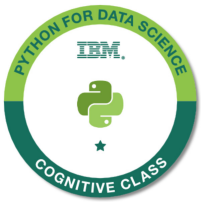
Issued by: IBM

Issued to: Akash Dubey

Issued on: 20 June 2020

Description

This badge earner has developed an understanding of Blockchain principles and practices and how they can be applied within a business environment. They have an understanding of Blockchain and distributed ledger systems, the important concepts and key use cases of Blockchain and how assets can be transferred in a Blockchain network.



Python for Data Science

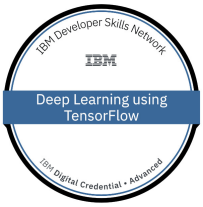
Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 June 2020

Description

The badge earner is able to write their own Python scripts and perform basic hands-on data analysis using IBM's Jupyter-based lab environment.



Deep Learning using TensorFlow

Issued by: IBM

Issued to: Akash Dubey

Issued on: 26 June 2020

Description

This badge earner has an understanding of essential concepts, functional attributes, operational considerations and the execution pipeline when using TensorFlow. This includes how TensorFlow can be used in curve fitting, regression, classification and minimization of error functions. The earner has also demonstrated knowledge of how to apply TensorFlow for backpropagation to tune the weights and biases while the Neural Networks are being trained.

Applied Data Science with Python - Level 2

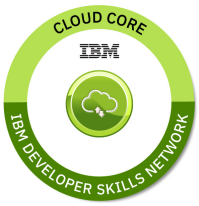
Issued by: IBM

Issued to: Akash Dubey

Issued on: 29 June 2020

Description

This badge earner is able to code in Python for data science. They can analyze and visualize data with Python with packages like scikit-learn, matplotlib and bokeh.



Cloud Core

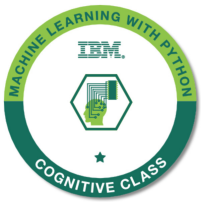
Issued by: IBM

Issued to: Akash Dubey

Issued on: 1 July 2020

Description

This badge holder understands the basics of cloud technology and is able to describe cloud platforms and models including IaaS, PaaS, SaaS, Public, Private and Hybrid Multi clouds. The badge earner is familiar with essentials of cloud applications and terms like Virtualization, VMs, Containers, Object Storage, Microservices, Serverless, Cloud Native, and DevOps. The individual has also gained hands-on experience at creating a Cloud account and provisioning services on IBM Cloud.



Machine Learning with Python - Level 1

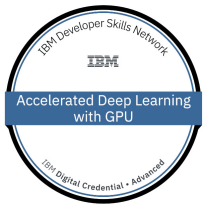
Issued by: IBM

Issued to: Akash Dubey

Issued on: 1 July 2020

Description

The badge earner demonstrates an understanding of Supervised vs. Unsupervised Learning, applications of different types of machine learning models, and how to build and evaluate machine learning models.



Accelerated Deep Learning with GPU

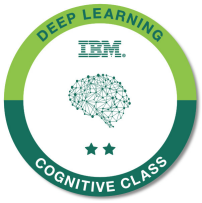
Issued by: IBM

Issued to: Akash Dubey

Issued on: 3 July 2020

Description

This badge earner has acquired essential knowledge related to how accelerated hardware can be leveraged to overcome scalability challenges common with deep learning solutions. This includes an understanding of how a graphics processing unit (GPU) can be used to accelerate convolutional neural network computations within a cloud computing environment.



Deep Learning

Issued by: IBM

Issued to: Akash Dubey

Issued on: 10 July 2020

Description

This badge earner understands the main concepts of Neural networks. The individual knows which network is used to tackle a problem, and can implement different shallow and deep networks with TensorFlow.

Deep Learning Essentials

Issued by: IBM

Issued to: Akash Dubey

Issued on: 10 July 2020

Description

This badge earner has acquired core knowledge of how the Deep Learning class of machine learning algorithms can be harnessed for more powerful and insightful data processing and pattern creation used in decision-making processes. This includes how convolutional neural networks are used to enhance the effectiveness of image recognition and classification.

IBM Blockchain Foundation Developer V2

Issued by: IBM

Issued to: Akash Dubey

Issued on: 12 July 2020

Description

This badge earner has demonstrated the foundational knowledge needed to develop for Hyperledger Fabric using the IBM Blockchain Platform VS Code extension. The earner has gained hands-on experience of building, deploying, testing, debugging and updating a Hyperledger Fabric blockchain application and smart contract.

Getting started with Microservices with Istio and IBM Cloud Kubernetes Service

Issued by: IBM

Issued to: Akash Dubey

Issued on: 5 August 2020

Description

The badge earner is able to: describe the 12-factor app principles, list the benefits of cloud native apps and the microservices architecture, describe how microservices are managed with IBM Cloud Container Service and Istio, show how to design microservices and how they communicate, show how a service mesh helps with microservice implementations, describe how Istio can be used to connect, manage, and secure microservices, and describe the logical components of Istio's data and control plane.

Beyond the Basics: Istio and IBM Cloud Kubernetes Service

Issued by: IBM

Issued to: Akash Dubey

Issued on: 6 August 2020

Description

The badge earner can install Istio in a cluster, deploy a sample app, and set up the Istio Ingress controller. The individual knows how to use metrics, logging and tracing to observe services. The earner is also able to perform simple traffic management such as A/B tests and canary deployments, secure a service mesh, and enforce policies for microservices.

Building Cloud-Native and Multicloud Applications

Issued by: IBM

Issued to: Akash Dubey

Issued on: 9 August 2020

Description

After earning this badge, the badge earner is able to make decisions about migrating existing images to cloud; modernizing applications; using cloud-native practices; leveraging best practices for continuous integration and continuous delivery; and managing multiple cloud infrastructures, applications and middleware.

Docker Essentials: A Developer Introduction

Issued by: IBM

Issued to: Akash Dubey

Issued on: 10 August 2020

Description

Earners of this badge know what Docker containers are and their benefits. The individual knows how to run containers from Docker Hub, create Docker containers, and how to solve basic problems of orchestration (reconciliation, scaling, high availability, service discovery). The badge earner also understands best practices for using DockerFiles and the basics of how to use tools such as the IBM Cloud Kubernetes Service.

Containers & Kubernetes Essentials

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner is able to build and run a container image and understands Kubernetes architecture. They know how to: write a YAML deployment file; expose deployment as a service; manage applications with Kubernetes; use ReplicaSets, auto-scaling, rolling updates and service binding; deploy services; and reap the benefits of OpenShift, Istio and other key tools.

Containers, K8s and Istio on IBM Cloud

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

After completing this learning path, the badge earner understands 12-factor apps and how microservices are managed with the IBM Cloud Kubernetes Service and Istio. The individual understands containers, Kubernetes, and how to deploy containerized apps. The earner can also deploy microservices in a cluster and knows how to connect, manage, and secure those microservices.

Hybrid Cloud Conference – App Security and Threat Modeler

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner has been introduced to Hybrid Cloud concepts for application development and DevOps implementation. The earner has gained knowledge towards building smart and secure applications in the cloud by creating a conceptual credit card application using Red Hat® OpenShift® on IBM Cloud®.

Hybrid Cloud Conference – Microservices Architect

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner has been introduced to Hybrid Cloud concepts for application development and DevOps implementation. The earner has gained knowledge towards building smart and secure applications in the cloud by creating and deploying microservices architecture to a conceptual credit card application using Red Hat® OpenShift® on IBM Cloud®.

Hybrid Cloud Conference – Service Mesh Networker

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner has been introduced to Hybrid Cloud concepts for application development and DevOps implementation. The earner has gained knowledge towards building smart and secure applications in the cloud by securing communication in a conceptual credit card application with OpenShift® Service Mesh on IBM Cloud®.

Hybrid Cloud Conference – Serverless Innovator

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner has been introduced to Hybrid Cloud concepts for application development and DevOps implementation. The earner has gained knowledge towards building smart and secure applications in the cloud by adding a rewards points feature to a conceptual credit card application with an OpenShift® Serverless on IBM Cloud® addition that reacts to new credit card transactions.

Hybrid Cloud Conference – Pipeline Builder

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner has been introduced to Hybrid Cloud concepts for application development and DevOps implementation. The earner has gained knowledge towards building smart and secure applications in the cloud by including CI/CD solutions based on Tekton, using OpenShift® Pipelines on IBM Cloud®.

Hybrid Cloud Conference – Application Developer

Issued by: IBM

Issued to: Akash Dubey

Issued on: 22 January 2021

Description

This badge earner has been introduced to Hybrid Cloud concepts for application development & DevOps implementation. They gained extensive knowledge towards building smart & secure applications in the cloud. Through hands-on labs, they demonstrated working knowledge & understanding in the topics of application security & threat modeling, microservices architecture, service mesh networking, serverless computing, & continuous integration & delivery pipelines using Red Hat® OpenShift® on IBM Cloud®.

Cloud Native Security Conference - Data Security

Issued by: IBM

Issued to: Akash Dubey

Issued on: 3 April 2021

Description

This badge earner has been introduced to Cloud Native Security concepts. The earner has gained knowledge of the essentials of Data Security and gained hands-on skills to secure data storage on an encrypted Object Storage using S3FS-Fuse, and Persistent Volume (PV), Persistent Volume Claim (PVC) for a MongoDB and Java Spring application.

Cloud Native Security Conference - DevSecOps

Issued by: IBM

Issued to: Akash Dubey

Issued on: 3 April 2021

Description

This badge earner has been introduced to Cloud Native Security concepts. The earner has gained knowledge of the essentials of DevSecOps and gained hands-on skills to secure their DevOps pipeline and infrastructure using Source-to-Image (S2I) for OpenShift with a Universal Base Image (UBI), custom builder and runtime images, Templates, BuildConfig and DeploymentConfig.

Certificate of Completion

*This is to certify that **Akash Dubey** successfully completed 40.5 total hours of **NodeJS - The Complete Guide (MVC, REST APIs, GraphQL, Deno)** online course on June 8, 2021*

Academind by Maximilian Schwarzmüller
Academind by Maximilian Schwarzmüller, Instructor

Maximilian Schwarzmüller
Maximilian Schwarzmüller, Instructor

&

Udemy

Certificate no: **UC-8b29a2aa-b335-4272-992e-eea23dc3c251**
Certificate url: **ude.my/UC-8b29a2aa-b335-4272-992e-eea23dc3c251**
Version 3

#BeAble